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Social Support and Coping Strategies among Swedish and Sudanese Older Persons

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Abstract

Sweden and Sudan represent different forms of family and societal structures. Nevertheless, older persons in either country have to develop coping strategies in order to be able to handle their life. Their coping patterns interact with the family and other close persons.

This paper aims to contribute to the understanding of social support and coping strategies among older persons in Sweden and Sudan.

A cross-cultural and semi-structured interview study was performed with 85 older persons (26% men) aged 68–102 years, living in their own homes, receiving some home services in Stockholm, Sweden.

Interviews were also conducted with 42 older persons (24% men) aged 60-85 years living in extended families in an outskirts of Khartoum, Sudan.

The subjects were asked to answer a standard social support questionnaire including availability of attachment (AVAT) and social interaction (AVSI). Their situation was also explored by means of the “coping wheel”. This was used in three forms (participant activities in the past, present, and in the future).

Scores for perceived “control” and “emotion” were calculated on the basis of all the individual activities reported in the "wheel."

To test the difference between the two groups with regard to coping strategies, descriptive statistics and Chi-square tests were applied. Multivariate one-way analysis of variance was used to test the differences between Swedish and Sudanese older persons in AVSI, and AVAT, adjusting for age and gender.

A content analysis was performed for the coping activities in the past, at present and in the future. As content analysis has no single form or stage, the answers were processed and analyzed without pre-conceptions.

The “control” score both in the past and in the future was significantly higher in the Sudanese sample while the present “emotion” score was significantly higher (more positive) in the Swedish sample.

Our results suggest that traditional norms and culture have an effect on social support as well as coping strategies for older persons. The family plays a very important role in enhancing psychosocial wellbeing.

It seems that Swedish older persons use much of their time for hobbies and leisure activities, whereas the Sudanese older persons seem to be struggling for survival.

Keywords: Elderly; Coping; Social network; Ethnic group

Introduction

Many people are able to age in good health and remain active participants in society throughout their lives. Others experience physical and cognitive limitations, and may lose the ability to live independently [1]. Aging is a triumph of development. Increasing longevity is one of humanity’s greatest achievements. People live longer because of improved nutrition, medical advances, health care as well as education and economic wellbeing [2].

In 2010-2015, the life expectancy is 78 years in developed countries and 68 years in developing regions. Population aging presents social, economic and cultural challenges to individuals, families, societies and the global communities [3]. The issues include how individuals find

fulfillment, at what age they retire, their quality of life once they retire; and how health systems respond to the altered needs of those living longer [2].

Like many Western countries, Sweden has been well off economically, and the population has good health and a long life span [4]. According to the latest census in 2011, of 864,324 inhabitants in Stockholm, 14.17% were 65 years and over and had home-service. Among those, 4.48% were 80 years and above [5]."

Sudan has a total population of 39.2 million; Khartoum is the capital and largest city with a total population of 5181185. About 5% are 65 years of age and above; the total population 75+ is 61798; 33498 are males; 28300 are females (Sudan Central Bureau of Statistics 2010). As from 1990, the country has been experiencing a high birth rate and a high, but declining, death rate and is expected to continue its rapid population growth, with a large number of old persons, due to improved health services [6]. Like other developing countries, Sudan is having problems in delivering the most basic services to the population. The projects Help Age International (HAI) and Sudanese Red Crescent have established a health centre and a development programme for the older persons to improve their quality of life. Older persons need better health, as well as psychological and social support because they are the most vulnerable group affected by social, economical and political factors [7]. In Sudan, the pension system provides a very small amount of money to some old people and very few benefits from these services [8].

During the last two decades of the 20th century, extensive changes were imposed in the caring of old persons in Sweden. Today, one sixth of the population is above the age of 65 years (Nat Board 2005:33). The average longevity is 82.4 years for women and 77.9 years for men. About a quarter of a million of older people receive nursing and caring in some form from the municipality. The trend during the last years is clear: that older persons shall stay at home as long as possible and get their help there. However, every second municipality has diminished the number of places in special living, but only half of these municipalities have compensated this by allocating more home services to those staying at home.

Older people in Sudan face many problems. Poor diet, inadequate housing, bad health and isolation often contribute to their poverty. Many older people are forced to work at a very old age, and they quit working only when they are physically or mentally unable to continue. A few of them have social security or insurance. Earning a living remains the priority to them, [9].

Both Sweden and Sudan represents different forms of family and society structures. Nevertheless, in both countries, older persons have to develop coping strategies in order to be able to handle their daily life. Their coping patterns interact with family members and other close persons.

On the basis of predictions of socio-emotional selectivity theory and social convoy theory, a meta-analysis on age-related social network changes and effects of life events on social networks was conducted; findings fit the fact that normative and age-related social network changes are due to normative, age-related life events [10].

One recent study confirmed that older adults engage in social network interactions marked by compensatory processes beyond loss of network members. These social network processes are of emotional and functional significance for the older adult [11].

According to a Korean study, young–old (age 65-74) subjects were more likely to be in the Couple-focused type; more of the oldest old (Age 85+) belonged to the restricted type. All other networks were more likely to report higher life satisfaction and less depressive symptomatology [12].

One of the studies showed that family networks are needed in aging. Family relations contribute to social status across the life span [13].

The conclusion of a Norwegian study conducted in senior centers, Norway, was that lack of social support and somatic health problems were associated with psychological distress in elders. Social support acted as a mediator, implying that the negative effect of somatic health problems, especially hearing, on psychological distress was mediated by low social support, [14].

A review of quantitative studies linking social support (SS) to the health of older people in Middle Eastern countries provided strong evidence for a positive relation between SS and mental health.

One of the studies confirmed the fact that Social networks change with age and influence physical and mental health. The study measured the impact of cognition and depression on social networks; more extensive depressive symptomatology was associated with close and inner circle relationships [15].

In the set of dimensions used to define social support, four of the most frequently used attributes of social support were suggested: emotional, instrumental, informational, and appraisal [16].

Coping is defined as “efforts’, both action oriented and intra psychic to manage (i.e. master, tolerate, reduce, minimize) environmental and internal demands, and conflicts among them, which tax or exceed a person’s resources”. It includes both ‘defenses' and coping strategies. Coping can occur in anticipation of a stressful confrontation or in reaction to a present or past situation [17].

One way of measuring coping is the “coping wheel” technique. The coping wheel is a semi projective technique that requires individuals to recall their daily activities. It maps the perception of any situation. The coping wheel was originally used for predicting ability in soldiers to stand severe stress [18]. In the present study, it was used for the description of the past, present, and future situation in older life. The validity of the coping wheel (including the past, present and future) has been tested indirectly in previous studies [19-22]. The coping wheel is easy to administer by means of interview when the client is illiterate or disabled.

There is a lack of cross-sectional, cultural and comparative studies especially within and between countries in Africa and or the Arab world concerning older persons with regard to coping strategies, and social support among older persons.

Accordingly, this study of elderly in Sweden and Sudan aimed at comparing factors in Sweden and Sudan that might have significance for social support and coping strategies, on the individual as well as on the societal level.

Methods

In order for those measures to be appropriate for use in Sudan and Sweden, it was necessary to develop equivalent measures. Methodologically, the study in both countries followed a strict protocol based on random selection and inclusion/exclusion criteria.

MMT was performed on the Sudanese and Swedish subjects. The Sudanese subjects were tested with regard to their cognitive abilities and dementia, based on the pilot studies performed with dementia subjects aging 70-95 yrs. The MMT ranges from 8 to 22. In order to make Sudan and Sweden comparable from this point of view two-scale steps were excluded because of the differences in literacy status and social structure interaction. Accordingly, the total and minimum score calculation was made with reference to a 4th grade education.

We have concluded that the assessments used in the project are methodologically feasible with dementia subjects who have the scores 20 and above.

Population

Eighty-five Swedish older persons (74% females) were included in the study. Two of them were excluded due to aphasia. The age range was between 68 and 102 years of age. The study was carried out in central Stockholm with older persons (all Swedish speaking) receiving some home services. The subjects were part of a longitudinal EU study [23] and were initially tested six months prior to the present study after informed consent; interviews were conducted in their homes in one hour and fifteen minutes to two hours (Table 1).

Forty-two Sudanese older persons, (76% females) were included in this study. The age of the subjects varied between 60 and 85 years. Interviews were conducted in the Red Crescent Health centre in a densely populated area northwards of the capital Khartoum after verbal consent. The selection was based on random sampling of older persons, who used to come to the clinic as outpatients and were living in their homes; three of them were living alone. The subjects living in this area come from different parts of Sudan with different backgrounds, different tribes and ethnic groups, different religions and different dialects but all knew Arabic, (Table 1).

Number and Sex	Sudan	Sweden	Sudan Pilot Project
Number	42	85	7
Sex Men (%)	10 (24)	20 (24)	3 (43)
Women (%)	32 (76)	65 (76)	4 (57)
Mean Age ± Stdev	69.48 ± 6.03	85.15 ± 6.38	80.86 ± 9.41

Table 1: Population characteristics (number, age, and sex) for 42 Sudanese 85 Swedish older persons and, also, for the 7 persons in the pilot project in Sudan.

Instruments

Social support was assessed using a modified Swedish version of the Interview Schedule for Social Interaction. It has been developed for use in population studies, and examined for reliability and validity [24]. The instrument yields two scales;–the social integration scale (AVSI) describes the structural measurement, incorporating both the quantitative and qualitative characteristics of the social network. It consists of six items with a total score ranging from zero to 28. The attachment scale (AVAT) describes the availability of close emotional support, mainly from family and close friends. It comprises six items with a total score ranging from zero to 11 (Appendix 1).

The older persons in Sweden and Sudan were interviewed regarding social support and tested by means of the coping wheel. One of the authors had to fill in the forms for all the Sudanese as they were illiterate, and two of the authors have also filled in the forms for older persons in Sweden with visual, hearing or physical impairment. The coping wheel may differentiate different populations and quantify the levels of the appraisal process. Successful processing is required for establishing an adequate coping potential. The perception was assessed by four indices: 1) the clarity or structure of perception; 2) the amount of emotion (positive or negative) invested in the perception; 3) the netto valence i.e. emotional loading (positive, neutral, or negative); and 4) the feeling of control over the situation [19].

Previously, a pilot study for older persons had been performed in an outskirts area of Khartoum in Sudan. The coping wheel was used with seven illiterate older persons (4 males and 3 females), aged 70-95 (see Table 1), staying in their own homes. The aim of this pilot study was to explore the feasibility of the instrument for older persons in Sudan. The results showed that the instrument was feasible after careful scrutiny of the translation.

Data treatment

A combination of quantitative and qualitative methods was used. These two methods supplement each other.

Quantitative analyses

To test the difference between the two groups with regard to coping strategies, descriptive statistics and Chi-square tests were used. Multivariate one-way analysis of variance was used to test the differences between Swedish and Sudanese older persons in AVSI, and AVAT, adjusting for age and gender.

Qualitative analyses

A content analysis (Baxter 1994) was performed for the coping activities in the past, at present and in the future. As content analysis has no single form or stage, the answers were processed and analyzed in the following two stages:

Stage 1: The coping activities were noted for the Sudanese as well as for the Swedish group.

Stage 2: Based on the activities mentioned by the propend, eight categories were developed: 1) Health concerns; 2) social activities (Social gatherings, clubs); 3) work and housework (cleaning, cooking, water supply); 4) family matters including marriage; 5) morality and religious questions including independency; 6) leisure time (hobbies,

recreation, sport, promenades, travelling); 7) care/nursing; and 8) education.

Ethics

The Swedish study was approved by the local research ethics committee at the Karolinska Institutet (315/2001). In Sudan, the study was approved by the administration of the Sudanese Red Crescent and the responsible doctor who was in charge of the clinic.

Results

Participants

The Swedish older subjects were selected from a Swedish longitudinal project in Stockholm. In this project researchers made home visits to older subjects receiving home services and monitored their health status. The sample included 85 persons (26% men) aged 68-102 years.

In Sudan, the study subjects were selected from a Sudanese project assisting elderly economically, socially and healthily. In this project, interviews were conducted with 42 older persons (24% men) aged 60-85 years living in extended families in an outskirts area of Khartoum. They regularly used to attend the Health centre clinic, which is supported by the Sudanese Red Crescent and Help Age International.

Table 2 shows that, on the social interaction (AVSI) and attachment (AVAT) mean scores for the Swedish and Sudanese older participants, the subjects seem to stand closer to each other in Sudan than in Sweden, i.e. all of them had contact with others with the same interest and all of them could speak about everything with at least somebody.

Elderly Sudanese persons had significantly higher mean scores on both AVSI and AVAT than the Swedish subjects (Figure1). The Swedish ones were older, mean age 85.3 (SD=7.07) than the Sudanese, mean age 69 (SD=6.03). Age was dichotomized (77 and over/76 and under) for Sweden and Sudan respectively, and used with nationality in a two-way analysis of variance. Age made no difference in the P-values and did not directly interact with nationality in the prediction of AVSI and AVAT scores.

	Sudan % N=42	Sweden% N=85	Chi-Square (yes/no) test & Mann-Whitney (graded responses) U-test and Significance
AVSI items			
Nro:1 Others have same interest	100.00	81.11	0.003**
Nro:2 Has somebody to speak to	100.00	94.44	0.149 NS
Nro:3 Can come to you whenever	90.48	73.86	0.029*
Nro:4 Can speak about everything	100.00	86.67	0.013*
Nro:5 Can borrow things when needed	71.43	70.11	0.878 NS
Nro:6 Can talk about difficulties	90.48	79.31	0.114 NS
AVAT items			
Nro:1 Can get support	90.48	89.77	0.901 NS
Nro:2 Has a close friend	95.24	84.88	0.087 NS
Nro:3 Can talk about happy things	97.62	78.41	0.005**
Nro:4 Can talk about inner feelings	90.48	69.32	0.008**
Nro:5 Somebody can give support	97.62	69.41	0.0003***
Nro:6 Feels being appreciated	95.24	76.19	0.008**
*p<0.05, **p<0.01, ***p<0.001			

Table 2: Availability of social integration (AVSI) and Availability of attachment (AVAT) perceived by 85 Swedish persons and 42 Sudanese (individual items)

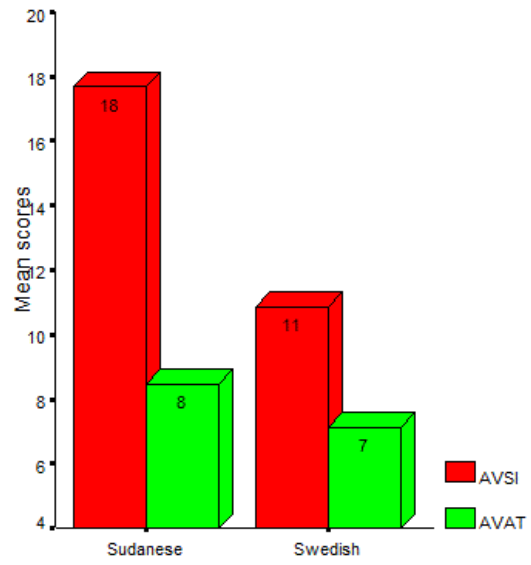

Figure 1: Mean Score on Availability of Social Interaction (AVSI) and Availability of Attachment (AVAT) for 42 Sudanese and 85 Swedish Older Persons, AVSI: p=< 0.0001, AVAT: p=0.03

Figure 2 shows that Sudanese older persons had significantly higher scores on past and future control than the Swedish ones, while the mean score on the present emotion was significantly higher (more positive) in the Swedish than in the Sudanese sample.

The subjects were asked to answer a standard social support questionnaire including availability of attachment (AVAT) and social interaction (AVSI). Their situation was also explored by means of the "coping wheel". This was used in three forms (participant activities in the past, present, and the future).

Scores for perceived "control" and "emotion" were calculated on the basis of all the individual activities reported in the "wheel".

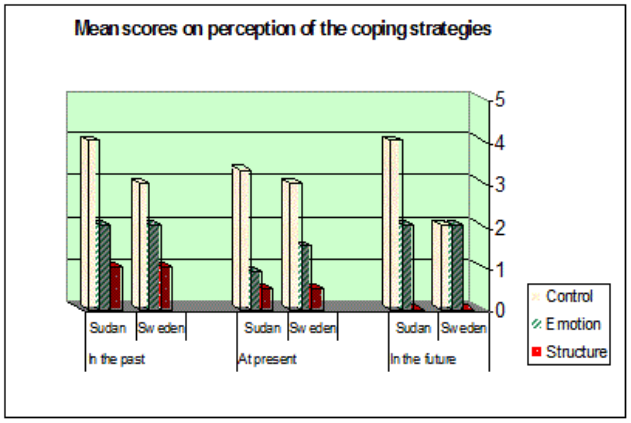

Figure 2: Mean scores on Perception of the situation for 42 Sudanese and 85 Swedish older persons, Past control higher in Sudan z (adjusted for tails) -3.28, p=0.001, Present emotion higher in Sweden z (adjusted for tails) -3.72, p=0.0002, Future control higher in Sudan z (adjusted for tails) -2.52, p=0.01

Analyses of coping activities in Sudan and Sweden showed that the mean number of activities in Sudan was overall lower in the past and at present as well as in the future (Table 3).

	Coping activities in the Past		Coping Activities at Present		Coping Activities in the Future	
	Sudan	Sweden	Sudan	Sweden	Sudan	Sweden
Mean number of activities	1.02 ± 0.33	2.10 ± 0.99	1.52 ± 0.80	1.76 ± 1.01	1.12 ± 0.83	1.52 ± 0.91
Activities number (%)						
0	0	2 (2)	2 (5)	2 (2)	8 (19)	4 (5)
1	37 (88)	17 (20)	22 (52)	38 (45)	24 (58)	48 (56)
2	5 (12)	40 (47)	12 (29)	25 (30)	8 (19)	16 (19)
3	0	19 (23)	6 (14)	17 (20)	1 (2)	16 (19)
4	0	6 (7)	0	1 (1)	1 (2)	1 (1)
5	0	1 (1)	0	2 (2)	0	0
Total Number Participants	42 (100)	85 (100)	42 (100)	85 (100)	42 (100)	85 (100)

Table 3: Coping activities in the past, at present, and in the future, for 42 Sudanese and 85 Swedish persons are presented with number of activities in every group, and percentage out of the total number of participants:

Table 4 shows daily activities for the Swedish and the Sudanese older persons (in the past, present, and future). The daily activities for the two groups were largely different. The main daily activities for the Swedish older persons were involvement in clubs, political and social

societies, health matters and nature. In Sudan, all of the older persons had a job (housework as cleaning, cooking and water supply) in the past activities and almost half of them were still working at present. The proportion of participants willing to continue working decreased in the "future" wheels. Analyses of the differences between Sudan and Sweden with Chi-square tests showed that work, social activities and spare time were all significantly different ($p< 0.001$) between the countries for all the three periods (past, present and future). Family matters differed significantly in the past ($p< 0.01$) and at present ($p< 0.05$). Health concerns were significantly different only in the present wheels ($p< 0.05$), and morality questions both at present ($p< 0.001$) and in the future ($p< 0.01$). Educational activity was the only one that differed significantly between the countries in the past ($p< 0.05$) and care/ nursing, finally, was the only kind of activity differed significantly at present ($p< 0.05$).

Groups of coping activities (mean ± stdev)	Past Activities		Present activities		Future Activities	
	Sudan	Sweden	Sudan	Sweden	Sudan	Sweden
Diverse forms of work (House works; cleaning, cooking, shopping, water supply)	1.00 ± 0.00	0.40 ± 0.49	0.86 ± 0.35	0.22 ± 0.42	0.40 ± 0.50	0.13 ± 0.34
Chi-Square value & Probability	42.11***		45.97***		12.40***	
Social activities (Social gathering & activities, clubs, TV, hobbies, reading, writing, singing, sewing, political & cultural issues, voluntary organizations)	0.07 ± 0.26	0.84 ± 0.37	0.24 ± 0.43	0.87 ± 0.34	0.21 ± 0.42	0.76 ± 0.43
Chi-Square value & Probability	67.45***		50.22***		35.02***	
Spare-time (Sport walking, nature, travelling, vacations)	----	0.59 ± 0.50	-----	0.33 ± 0.47	----	0.26 ± 0.44
Chi-Square value & Probability	40.75***		17.75***		13.15***	
Family matters (Family matters, marriage)	----	0.14 ± 0.35	0.19 ± 0.40	0.15 ± 0.36	0.19 ± 0.40	0.13 ± 0.34
Chi-Square value & Probability	6.55**		0.29*		0.82 NS	
Health concerns (Health, sleeping, resting, calm)	----	0.02 ± 0.15	----	0.12 ± 0.32	0.07 ± 0.26	0.13 ± 0.34
Chi-Square value & Probability	1.00 NS		5.36*		0.96 NS	
Moral questions (Religious duties, interests, Security, not alone, live on memories, tired at living)	0.05 ± 0.22	0.05 ± 0.21	0.24 ± 0.43	0.04 ± 0.19	0.19 ± 0.40	0.04 ± 0.19
Chi-Square value & Probability	0.00 NS		12.58***		8.56**	
Education (Education; studies, courses)	----	0.11 ± 0.31	----	0.02 ± 0.15	0.05 ± 0.22	0.02 ± 0.15
Chi-Square value & Probability	4.79*		1.00 NS		0.54 NS	
Care, nursing (Independency, caring activities, live without difficulties)	----	0.01 ± 0.11	----	0.02 ± 0.15	----	0.07 ± 0.26
Chi-Square value & Probability	0.50 NS		1.00 NS		3.11 NS	

Table 4. Groups of coping activities in the past, at present, and in the future for 42 Sudanese and 85 Swedish older persons with means and standard deviations, Chi-square

Discussion

The explanations of the findings need to take into account several considerations. Older Sudanese persons seem to be closer to each other than Swedish older persons. All of the Sudanese older persons had contact with other persons. They had somebody to speak to, and they could speak about everything compared to Swedish older persons who had fewer contacts.

Only three older persons were living alone but still had contact with friends and relatives. The role that older persons play in the family enhances their wellbeing (HAI 2002a, b). In Sweden, on the other hand, older persons were living alone, and some had contacts with their children, relatives or friends but, in most of the cases, children were not living nearby and the mean of communication was mostly through telephone calls.

Older persons living in Barona are a rather vulnerable group. They have lost their homes and resources. For the past thirty years, persons from southern and western Sudan have been migrating northwards to the capital Khartoum, due to drought and conflict in their home areas, as well as looking for better jobs. Most of them had their land, their animals and property in the area they have migrated from - where they had been economically satisfied- lost (HAI 2002a).

As a result, their general wellbeing and performance in everyday activities might have been affected. As coping serves emotion regulation and problem solving, this group of older persons might have a conflict between their internal and external demands.

The formal age of the Swedish subjects was higher than the Sudanese. It is likely that the difference between real and reported age in Sudanese older persons is rather small or even non existing, because

of the fact that the older generation in Sudan, especially in rural areas, used to give an age in relation to a known incident that happened the same year they were born, e.g. the famine that occurred in 1906. Hence, the difference in mean age is probably non-exiting.

Finally, activities for the older persons in Sweden are focused on activities enabling them to increase their knowledge, enhance their health and completely fill their spare time. The main daily activities for the Sudanese older persons contained plantation activities e.g. harvesting, house needs e.g. water and wood supply, bird hunting and health promotion activities. The Sudanese older persons daily activities are related to the daily living.

The present study indicates that Sudanese older persons get more emotional support and they are better socially-integrated than the Swedish older persons. In Sudan, traditional attitudes and influence of the extended families is the main feature for family structure. It maintains the social identity. The family provides emotional, social and economic support for older persons. Sudanese older persons reported stronger control of the past and the future, while Swedish older persons had a more positive emotion for the present.

In conclusion, traditional norms and culture seem to be strong factors in strengthening social support as well as coping strategies for older persons. The family plays a very important role in enhancing psychosocial wellbeing of older persons.

Policy makers in developing countries usually do not consider aging and old persons' conditions as a priority. They believe that there are more important issues to focus on. Thus, old persons do not receive enough care and attention [7,25].

One limitation of the present study was the small sample size of the elderly Sudanese. In the future, we need to cater for this issue.

Our results imply that traditional norms and culture have an effect on social support as well as coping strategies for older persons.

Conclusions

There is an enormous difference between Swedish and Sudanese older subjects with regard to qualities of daily activities. In Sweden, it seems that older persons use much of their time for leisure activities and hobbies, while Sudanese older persons seem to be struggling for survival. In Sudan, traditional attitudes and the influence of the extended families is the main feature for family structure and it maintains the social identity. The family provides emotional, social and economical support for older persons. In some cases older persons might need to have extra work to support themselves or their families

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